IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

SERIAL NO.: 256,689 ş DOCKET D-5050 999 FILING DATE: October 12, 1988 GR. ART UNIT: 187 š APPLICANT: CHARLES T. CASKEY, ET AL EXAMINER: A. Marschel.

TITLE: MULTIPLEX GENOMIC DNA § AMPLIFICATION FOR DELETION

§ DETECTION

DECLARATION UNDER 35 C.F.R. 1.132

Dear Sir:

- I, Marcus Grompe, M.D., do hereby depose and say as follows:
- 1. I am familiar with the multiplex procedures described in U.S. Application Serial No. 256,689 filed October 12, 1988.
- 2. I am a postdoctoral fellow of molecular genetics in the Institute for Molecular Genetics at Baylor College of Medicine, One Baylor Plaza, Houston, Texas 77030. I am skilled in the area of molecular biology, oligonucleotide probes and synthesis of oligonucleotide probes and binding of oligonucleotide probes to DNA. A resume describing my experience is attached to this declaration.
- 3. I have personally been involved in the investigations described in this affidavit.
- 4. The following experiments were performed and the enclosed results were obtained in my laboratory:
 - Reaction Conditions. The multiplex reactions described herein were carried out in 100µL reaction volumes. Approximately 100 ng of DNA was added to a solution comprised of the following 67mM tris-HCl, 6.7mM magnesium chloride, 16.6mM ammonium sulfate, 50mM β -mercaptoethanol, $6.7\mu\text{M}$ ethylene diamine tetra-acetic acid and 170µg/mL bovine serum albumin. Taq polymerase was added to achieve a final concentration of 100 units/mL.

 $\alpha\text{-1-antitrypsin}$ and $\Delta\,F_{508}$ and can state the procedures described in the above-referenced patent application work for all of these genetic loci.

I hereby declare that all statements made herein on my own knowledge, are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 4/9/9/

Richard A. L. Gibbs